Inventor: Dr. Seree Pakarnseree et al.

Page 1 of 8

Fax No. +66-2-714-1443

# Golf Club Head With Springy Striking Area

Inventors: Dr. Seree Pakarnseree, Nuttasiri Pakarnseree, Koranan Pakarnseree and Passarin Pakarnseree

Address: 64/39 Ekamai 10, Moo Ban Flora House Watana, Bangkok 10110, Thailand.

### FIELD OF THE INVENTION

5

10

The present invention relates to sport devices which include a head of a golf club in its design and construction to allow a much greater distance of a golf ball flight upon striking.

## **BACKGROUND OF THE INVENTION**

Attempts have always been made to improve the distance of a golf ball flight. Some tried to improve a golf club head to have a striking face of improved 15 impact efficiency, U.S. Patent No. 6,478,692; while other invented a golf club head capable of enlarging flexible area of ball-hitting face- U.S. Patent No. 6,506,129; or invented a golf club striking plate with variable bulge and roll-U.S. Patent No. 6,428,426. Yet improvement is still needed since the designs of a

5

10

15

head of the presently available golf club do not allow a much greater distance or a better direction a golfer desires upon driving a golf ball. The present invention relates to construction of a special head of a golf club using a tight stretching of its striking plate with or without grooves, and/or strips, and/or strings with tight affixing of both ends to produce a face plate. Such structure and design would allow a much greater springy force to drive the golf ball when hit against such striking area at a highest speed possible to a target destination. It is the objective of the present invention to construct a striking area of either a metal- or woodenhead of a golf club or a putter where its body shell is hollow having a striking plate made of a thin sheet or plate of metal and/or nonmetal, with or without grooves, and/or strips and/or strings pulled or stretched to be most tightly affixed to the body shell or its frame to create a highest springy force upon hitting of a golf ball against such striking area. Such striking area component of the club head may be made of metal, alloy, graphite, fiberglass or any nonmetal material either rubber, tendon, leather, or any appropriate natural or synthetic materials such as plastic or any kinds of polymers, where these can be used either singly or as combination of different designs.

## BRIEF DESCRIPTION OF THE DRAWINGS

- FIG. 1 is a front-view of a golf club showing its front part having a club head, stem and grip;
- FIG. 2 is a blow-up picture of the face plate of the presently invented golf club head;
  - FIG. 3 is a cross-sectional view along line 1-1 of FIG. 2;
  - FIG. 4 is a cross-sectional view along line 2-2 of FIG. 2;
  - FIG. 5 is a cross-sectional view along line 3-3 of FIG. 2.

## SUMMARY OF THE INVENTION

10

A head of a golf club is described which can drive a golf ball a great distance. The club head has a hollow body shell with a front flat frame. The club head and its body shell may be made of either metal, non-metal, synthetic or non-synthetic materials. There mounted onto the flat frame either a striking plate and/or strips and/or strings also made of either metal, non-metal, synthetic or non-synthetic materials in a very tight or very stretched condition of different appropriate designs to give a springy, highest striking force upon hitting against a golf ball.

5

10

15

20

#### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

As shown in FIG. 1, a golf club with springy driving face plate consists of a grip or handle 10 connecting to a shaft 11 having a club-head 12 at its lowest end. The shaft 11 may be made of metal, graphite, fiberglass, or any materials known in the art. The club-head or body shell 12 is hollow with its front flat frame having an upper part 14, a left-sided part 15, a lower part 16 and a right-sided part 17. The frame can be made of metal and/or nonmetal either plastic and/or any synthetic polymers and/or any natural components and/or combination of these materials or any appropriate materials known in the art.

Strips 18 is made of metal or any materials which can give the greatest springy force or tension to drive a golf ball at a very high speed to a greatest distance possible. FIG. 2 shows that one end of each strip 18 is mounted onto part 15 using pin 19, where it is stretched to be very tightly fixed to part 14 or part 17 at the other end also through pin 19. The cross-sections of the club head are shown in FIGs. 3-5. Strips 18 are mounted parallelly to fill up the frame having a predetermined space 13 in between. Such invented golf club head, thus has a face plate which gives the greatest springy force to allow driving of a golf ball to a greatest distance possible.

Strips or strings or plate may have a smooth and/or rough surface and/or with grooves and/or with some convex or bulging surface, or combination of these, and/or where some strips or strings may be stretched not too tightly depends on desire. Strips or strings can also be knitted and/or woven with strips and/or with strings and/or twisting together where cross-section of strips or strings can be either square, rectangular, circular, hexagonal or of any geometrical shapes.

5

10

15

20

There can be one or more layers of what has been described above of same or different types to be fixed to the frame, for instance, one layer may be woven strings while the next layer may be strips, etc.; to form a face plate of this invented golf club head. Affixing can be made as a single layer or multilayer of different designs through pins or by tying or by welding to the frame, and where each layer of said multilayer may be of different predetermined degree of stretch or tightness. The strips and/or strings and/or plate can be coated, and/or enameled, and/or glazed with compounds synthetic or non-synthetic to increase or decrease springy force. In addition, there can be layer or layers of supporting materials with flexibility or elastic property as either synthetic or non-synthetic strips or strings or plate to cover as a whole or partly fixed to the frame next underneath the layer or strips or strings or plates.

It will be understood the modifications can be made in the above description without departing from the scope of this invention by one of ordinary skill in the art. It is accordingly intended that all matter contained in the above description or shown in the accompanying drawings be interpreted as illustrative rather than in a limiting sense.

It is also to be understood that the following claims are intended to cover all of the generic and specific features of the invention as described herein, and all statements of the scope of the invention which, as a matter of language, might be said to fall therebetween.